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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/022,472      | 10/30/2001  | Ellen M. Meyer       | BDD.10171           | 1672             |

7590 02/10/2005

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EXAMINER

CHORBAJI, MONZER R

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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1744

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/022,472

Applicant(s)

MEYER, ELLEN M.

Examiner

MONZER R CHORBAJI

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/12/02, 10/8/03</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

**This general action is in response to the application filing date of 10/30/2001**

#### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 6-7, 13-16 and 18-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Hight et al (U.S.P.N. 5,464,636).

With respect to claims 1 and 13, the Hight reference teaches adding a sufficient amount (col.30, lines 39-44) of an organic halogen donor (col.11, line 4, col.9, lines 35-337 and col.1, lines 22-26) to an aqueous solution in an aqueous system (col.1, lines 12-15) in order to control befouling and microorganisms in such solutions (col.1, lines 16-18). As a result, the addition of the N-bromosuccinimide compound inherently results in deodorizing such solutions.

With respect to claims 2-4, 6-7, 14-16 and 18-19, the Hight reference teaches the following: adding N-bromosuccinimide (col.9, lines 36-37), adding 1-bromo-3-chloro-5, 5-dimethylhydantoin (col.31, lines 45-49) and adding a halogen donor in an amount of 2 ppm (col.30, lines 43-44).

3. Claims 8-9 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Lin (WO 99/46350-IDS).

With respect to claims 8-9 and 12, the Lin reference discloses spraying into the atmosphere of an odor source an aqueous solution that includes an organic halogen donor (5-chloro-2-methyl-4-isothiazolin-3-one, page 9, formulation DO11B in table 3 and table 4 in example 1).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 5 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hight et al (U.S.P.N. 5,464,636) in view of Pocius (U.S.P.N. 4,295,932).

With respect to claims 5 and 17, the Hight reference fails to teach the addition of halogenated isothiazolines to the deodorizing composition; however, the Pocius reference, which is in the art of treating fluids, teaches the addition of 5-chloro-2-methyl-4-isothiazolin-3-one (col.3, lines 12-17). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of the

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Hight reference by including 5-chloro-2-methyl-4-isothiazolin-3-one as taught by the Pocius reference since the combination of chlorine and 5-chloro-2-methyl-4-isothiazolin-3-one result in reducing the total count of microorganisms in aqueous systems to zero (col.3, lines 51-55).

7. Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (WO 99/46350) in view of Hight et al (U.S.P.N. 5,464,636).

With respect to claims 10-11, the Lin reference fails to teach using halogenated succinimides and halogenated hydantoin; however, the Hight reference teaches the use of such compounds (col.9, lines 36-37 and col.31, lines 44-46). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of the Lin reference to include halogenated succinimides and halogenated hydantoin as taught by the Hight reference since such compounds are known to reduce halogen ions losses by reducing volatilization loss (col.31, lines 26-27 and lines 34-36).

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Both the Mouche' et al (U.S.P.N. 4,802,996) reference and the Moore, Jr. et al (U.S.P.N. 6,322,822) teach using organic halogen donors as in the instant claims in treating fluid systems.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MONZER R CHORBAJI whose telephone number is (571) 272-1271. The examiner can normally be reached on M-F 6:30-3:00.

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10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ROBERT J WARDEN can be reached on (571) 272-1281. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Monzer R. Chorbaji *MRC*  
Patent Examiner  
AU 1744  
02/04/2005

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